2016 MCAS Alternate Assessment (MCAS-Alt): State Summary of Participation and Achievement

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Purpose of this Document

This report provides a summary of the statewide participation rates and achievement results of students with significant disabilities who participated in the 2016 MCAS Alternate Assessment (MCAS-Alt). The MCAS-Alt evaluates and reports on the annual achievement of those students in meeting state standards and provides parents and teachers with vital information to assist in planning students' instructional programs and monitoring their progress. In 2016, 8,741 students in grades 3–12 participated in the MCAS-Alt. This number represents *all* students who submitted a portfolio, including first-year English language learners (ELLs), high school students resubmitting their portfolios in grades 11–12, and grade 9 students who took high school Science and Technology/Engineering (STE) tests in 2015 whose results are included in 2016.

This report includes the results of 8,373 students who participated for the first time in the ELA and Mathematics tests in grades 3–8 and 10, and who took an STE test either in grade 9 in 2015 or in grade 10 in 2016, for the purpose of determining school, district, and state accountability.

Students with significant disabilities are required by law to participate in statewide academic assessments and to be counted in overall achievement results. The Commonwealth is required to publicly report the aggregated results of all students, including those who participated in MCAS-Alt, in order to hold accountable schools, districts, and the state for the achievement of *all* students, and when determining whether each Massachusetts school and district is making progress toward reducing proficiency gaps.

In 2016, among students participating in MCAS-Alt for the first time (i.e., not including students who are resubmitting a high school portfolio or who are first-year ELLs), approximately 70 percent of portfolios earned a score at the *Progressing* achievement level. The percentage of portfolios at this level indicates that most students with significant disabilities are being provided with challenging educational opportunities to address the Massachusetts curriculum frameworks and are achieving their academic goals with a high degree of accuracy and independence.

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Executive Summary

The participation and achievement of students with disabilities in the 2016 MCAS-Alt administration are summarized below. Please see the appendices for results in each grade and subject, and for Achievement Levels and Descriptors.

- The number of students in grades 3–8 and 10 who participated in an alternate assessment in at least one content area was 8,373, or 1.7 percent of the total tested population. The percentage of students with disabilities who participated in MCAS-Alt was 9.1 percent of all students with disabilities, which represents a 0.1 percent increase from 2015.

- In English Language Arts (ELA), 56.9 percent of students performed at the *Progressing* level, a decrease of 18.1 percentage points from 2015, when 75 percent did so. The highest achievement in ELA was at grade 5, where 59.8 percent of students performed at the *Progressing* level. By contrast, the lowest achievement in ELA was at grade 10, where 48.2 percent of students performed at the *Progressing* level; the percentage of *Incomplete Portfolio* for all grades decreased by 7.6 percentage points, from 12.9 to 5.3. The percentage of portfolios at the *Emerging* level increased by 24.7 percentage points to 36.1 (See note on following page).

- In Mathematics, 80.8 percent of students performed at the *Progressing* level, an increase of 2.8 percentage points from 2015, when 78 percent did so. The highest achievement in Mathematics was at grade 4, where 85.6 percent of students performed at the *Progressing* level. By contrast, the lowest achievement was at grade 10, where 70.3 percent of students performed at the *Progressing* level.

- In Science and Technology/Engineering (STE), averaged across grades 5, 8, and 10, 79 percent of students performed at the *Progressing* level, an increase of 5.8 percentage points from 2015, when 73.2 percent of students did so. The highest achievement in STE was at grade 5, where 82.8 percent of students performed at the *Progressing* level. In grade 10, 69.4 percent of students performed at the *Progressing* level, an increase of 5.5 percentage points from 2015, when 63.9 percent of students did so.

- Between 2015 and 2016, student achievement in ELA at the *Emerging* level, one level below *Progressing*, increased markedly from 11.4 percent to 36.1 percent. In Mathematics, students performing at the *Emerging* level decreased marginally to 8.1 percent. In STE, averaged across grades 5, 8, and 10, 11.8 percent of students performed at the *Emerging* level, a decrease of 2.4 percent from 2015.

- Student achievement at the *Awareness* level, one level below *Emerging*, increased marginally in ELA to 1.6 percent; decreased marginally in Mathematics to .9 percent; and in STE, averaged across grades 5, 8, and 10, increased marginally to .9 percent.

- For the third consecutive year, the percentage of students whose portfolios were determined to be *Incomplete* decreased in all subjects. Averaged across all grades and subject areas, the percentage in ELA decreased from 12.9 to 5.3; in Mathematics from 12.2 to 10; and in STE

from 17.1 to 8. The continued increase in the percentage of portfolios submitted with all required evidence and information suggests a greater awareness of portfolio submission requirements by educators conducting the MCAS-Alt.

ELA–Writing

A notable decrease occurred in the number of scores of *Progressing* and *Incomplete*, along with an increase in the number of *Emerging* scores in ELA. This can be attributed to modifications in the scoring rules for ELA due to the introduction of a new ELA–Writing assessment in grades 3–8 and 10, a change from past years when only grades 4, 7, and 10 were assessed in ELA–Composition. The annual Writing assessment, and the development of new scoring rubrics to assess students' diverse expressive communication skills, resulted in a significant departure from the scoring patterns of previous years in ELA (See *2017 Educator's Manual for MCAS-Alt*, p. 71).

Table 1. 2016 MCAS-Alt Statewide Results by Subject

Subject/ (Grades)	MCAS-Alt Achievement Level										Total MCAS-Alt Portfolios
	Awareness		Emerging		Progressing		Needs Improvement (or Higher)		Incomplete		
	#	%	#	%	#	%	#	%	#	%	Number
ELA (3–8, and 10)	130	1.6	2,912	36.1	4,586	56.9	12	0.1	426	5.3	8,066
Mathematics (3–8, and 10)	75	0.9	658	8.1	6,585	80.8	10	0.1	817	10	8,145
Science and Technology/ Engineering* (5, 8, and 9/10)	26	0.9	349	11.8	2,352	79.3	3	0.1	237	8	2,967

* Results of students who took one of the four high school STE tests in 2015 when they were in grade 9 are included in the grade 10 High School STE results listed above. However, results for grade 9 students who participated in 2016 high school STE tests will not be summarized for official school, district, or state reporting until 2017, when they will be included with the results of grade 10 students who took one of the four STE tests in 2017. Grade 10 STE results include only students continuously enrolled in the state from fall of grade 9 through spring of grade 10.

I. Introduction

This report describes the statewide participation rates and achievement results from the spring 2016 administration of the MCAS-Alt in English Language Arts, Mathematics, and Science and Technology/Engineering. The MCAS-Alt has been administered annually since spring 2001 and is offered in every subject and grade for which a standard test is required.

This report also presents information on the students who participated in MCAS-Alt, including the nature of their disabilities, the participation of students in MCAS-Alt relative to students taking standard tests, and the methods used to evaluate student portfolios and report student scores and achievement levels.

State summaries of MCAS-Alt for 2001–2016 are available on the Department's website.

II. Background

According to state and federal laws, all students, including students with disabilities, are required to participate in statewide assessments. Student with significant disabilities who are unable to take the standard tests, even with accommodations, must take the MCAS-Alt. Decisions as to how each student with a disability will participate in MCAS are made by the student's Individualized Education Program (IEP) team and documented in the student's IEP, or in a 504 plan developed by the school or district. Information about the participation of students with disabilities in MCAS is available on the Department's website.

For each student scheduled to participate in the MCAS-Alt, schools must submit a portfolio consisting of instructional data charts and work samples based on the grade-level content found in the Massachusetts curriculum frameworks that has been modified to reflect challenging and attainable entry points for each student. The basis for modifying academic curriculum for students taking the MCAS-Alt is described in the *Resource Guide to the Massachusetts Curriculum Frameworks for Students with Disabilities*.

The purposes of the MCAS-Alt are to:

- ensure that students with significant disabilities are receiving a program of instruction based on the state's academic standards;
- determine how much knowledge based on the curriculum frameworks students with significant disabilities have learned;
- include difficult-to-assess students in statewide assessment and accountability systems;
- provide alternative pathways for some students with disabilities to earn a comparable score to a student in grades 3–8 who has taken a standard test in that subject, and in high school to earn a Competency Determination (CD) and become eligible to receive a diploma.

Participation Guidelines

A student with a *significant cognitive disability* is considered for an alternate assessment by his or her IEP team, when he or she:

- receives routine academic instruction based on learning standards in the curriculum frameworks for which the levels of complexity of content and skills have been modified substantially below the expectations of a non-disabled student enrolled in the same grade;

  AND

- receives intensive, individualized instruction across all settings in which a subject is taught, in order for the student to acquire, generalize, and demonstrate knowledge and skills;

  AND

- is generally unable to demonstrate knowledge and skills on a standardized paper-and-pencil test in the subject being assessed, even when accommodations are provided.

In addition, students with other complex and significant (though not necessarily *cognitive*) disabilities may be considered for an alternate assessment based on grade-level achievement standards if their disabilities would present *unique and significant challenges* to fully demonstrating their knowledge and skills on a standardized paper-and-pencil test, even if accommodations were provided.

Using all of the same criteria listed above, a student on a 504 plan may also be designated for an alternate assessment, and this designation documented in the plan.

Portfolio Contents and Structure

"Evidence" is collected by the student's teacher(s) and other school staff throughout the year in the subject being assessed, and organized in a portfolio that includes the following types of products and information:

- Work samples, video clips, and/or photographs documenting the student's performance of tasks based on the standards being assessed.

- Data charts (except for the ELA–Writing assessment) documenting the student's performance over a period of time during activities based on the learning standards being assessed. Data must be collected during at least 8 different instructional activities and must begin at a level of *accuracy* and/or *independence* below 80 percent in order to demonstrate that the student was taught challenging new skills, knowledge, and concepts. *Accuracy* is considered to be the percentage of correct student responses, and *Independence* the percentage of tasks, items, or activities during which the student required *no* assistance in responding.

- Supporting documentation, including descriptions provided by the teacher, reflection sheets that allow the student to evaluate his/her own performance, and other evidence that

indicates the context of the instruction and/or the method of demonstrating knowledge and skills in the subject being assessed.

The development of portfolios is guided by information found in the *Educator's Manual for MCAS-Alt*, which is updated annually, distributed at Department-sponsored training events, and posted on the Department's website.

Scoring MCAS-Alt Portfolios

Once portfolios are submitted to the Department each spring, they are reviewed and scored by scorers who are supervised by Department staff and their expert trainers. Prospective scorers receive extensive training and must qualify to become scorers. Scorers are monitored closely for accuracy and consistency throughout the scoring process. The Rubric for Scoring Portfolio Strands, shown in Appendix E, is used as the basis for scoring student portfolios, as well as the *Guidelines for Scoring MCAS-Alt Portfolios*. Portfolios that lack the minimum required evidence and provide insufficient information are scored *Incomplete*.

Once preliminary scores are provided to districts in mid-June, a score appeals process allows a school to initiate a request to rescore portions of a portfolio, based on a perceived inaccuracy in the preliminary scoring. Upon receipt of an appeal, the Department staff and its contractor review the student's portfolio and if necessary, rescore the section(s) in question. Scores may not be changed after the score appeals process is completed in late June.

III. Student Participation in 2016 MCAS-Alt

A total of 8,373 students in grades 3–8 and 10, or 1.7 percent of the total assessed population, participated in the MCAS-Alt in one or more content areas, as shown in Table 2. A slightly higher relative proportion of students in grades 3–8 took the MCAS-Alt compared with students in grade 10. Slightly more students were alternately assessed in Mathematics than in English Language Arts (ELA). See Appendix B for the MCAS-Alt participation rates in each grade and subject.

At each grade level, the percent of students with disabilities who participated in the 2016 MCAS-Alt ranged from a low of 1.0 percent in STE at grade 10 to a high of 1.8 percent in grades 4 and 5 in ELA and in grade 5 in Mathematics. See Appendix C for comparative rates of participation in each MCAS assessment format (i.e., routinely tested, tested with accommodations, or alternately assessed) by subject.

Table 2. Rate of Participation in MCAS-Alt by Students with Disabilities in Grades 3–8 and 10 in at Least One Content Area

Year	Total Students Taking MCAS-Alt	Percentage of All Assessed Students Taking MCAS-Alt	Percentage of Students with Disabilities Taking MCAS-Alt
2004	5,139	1.0%	5.5%
2005	6,131	1.2%	6.4%
2006	7,006	1.3%	7.7%
2007	7,621	1.4%	8.4%
2008	8,199	1.5%	8.4%
2009	8,738	1.6%	9.0%
2010	9,286	1.7%	9.1%
2011	9,325	1.7%	8.6%
2012	9,386	1.7%	8.8%
2013	9,111	1.7%	9.3%
2014	8,896	1.6%	8.9%
2015	8,650	1.7%	8.9%
2016	8,373	1.7%	9.0%

Table 3 shows the number of students with disabilities who took the 2016 MCAS-Alt in each grade and subject.

Table 3. Participation in 2016 MCAS-Alt by Grade and Subject

Grade	English Language Arts	Mathematics	Science and Technology/ Engineering
3	1,175	1,163	–
4	1,254	1,237	–
5	1,266	1,289	1,187
6	1,152	1,176	–
7	1,193	1,220	–
8	1,112	1,136	1,067
9*	–	–	227
10	914	924	715
Total	**8,066**	**8,145**	**3,196**

Table 4 shows the distribution of primary disabilities among MCAS-Alt participants. Slightly more than seventy-five percent of students who took MCAS-Alt had either an intellectual disability, autism, or multiple disabilities, with the remaining students accounted for in 11 other primary disability categories.

Table 4. Nature of Primary Disability Among 2016 MCAS-Alt Participants in Grades 3–8 and 10[a]

Primary Disability [b]	Total Number of Assessed Students in Primary Disability Category	Number of MCAS-Alt Participants in Primary Disability Category (n)	Percentage of Total MCAS-Alt Participants in Primary Disability Category [c] (n/8,373 x 100)	Percentage of Students in Primary Disability Category Who Took MCAS-Alt
Intellectual	4,755	2,681	32%	56.4%
Autism	9,011	2,915	34.8%	32.3%
Multiple Disabilities	1,865	756	9%	40.6%
Neurological	6,062	569	6.8%	9.4%
Communication	13,406	369	4.4%	2.8%
Specific Learning Disabilities	30,543	276	3.3%	0.9%
Emotional	9,074	170	2%	1.9%
Health	14,524	232	2.8%	1.6%
Developmental Delay	1,620	163	1.9%	10.1%
Sensory/Hard of Hearing or Deaf	589	78	0.9%	13.2%
Unidentified Disability	142	64	0.8%	45.1%
Physical	513	42	0.5%	8.2%
Sensory/Vision Impairment or Blind	315	35	0.4%	11.1%
Sensory/Deaf and Blind	74	23	0.3%	31.1%
Total	92,493	8,373	100%	9.1%

[a] The number of MCAS-Alt participants includes all students who took MCAS-Alt for accountability purposes in at least one subject.

[b] Primary disability data were reported by districts to the Department's Student Information Management System (SIMS) in March and June 2016.

[c] Percentages of participants by primary disability may not add to 100 percent due to rounding.

IV. 2016 MCAS-Alt Student Results

The lowest achievement level for students taking the standard MCAS tests is *Warning/Failing*. MCAS-Alt results are reported in one of three subcategories of *Warning/Failing* called *Progressing, Emerging*, and *Awareness.* These three achievement levels provide meaningful information to interpret the achievement of students whose performance is below grade-level. See Appendix D for descriptions of the achievement levels.

In 2016, the majority of students with significant disabilities performed at the *Progressing* level, indicating that they demonstrated their attainment of challenging academic goals at high levels of accuracy and independence, although these goals were below the grade-level expectations for nondisabled students. 2016 MCAS-Alt results are summarized below.

- In grades 3–8 and 10, the percentage of students who scored *Progressing* was:
  - 56.9 percent in ELA
  - 80.8 percent in Mathematics
  - 79.3 percent in Science and Technology/Engineering*

- The percentage of students who scored *Emerging* was:
  - 36.1 percent in ELA
  - 8.1 percent in Mathematics
  - 11.8 percent in Science and Technology/Engineering*

- The percentage of students who scored *Awareness* was:
  - 1.6 percent in ELA
  - 0.9 percent in Mathematics
  - 0.9 percent in Science and Technology/Engineering*

- Overall, 13.1 percent of students who participated in the MCAS-Alt portfolio scored *Incomplete* in at least one subject, indicating that the portfolio did not include the requisite evidence to generate an overall achievement level in the subject being assessed. The percentage of students who scored *Incomplete* by content area was:
  - 5.3 percent in ELA
  - 10 percent in Mathematics
  - 8 percent in Science and Technology/Engineering*

Appendix A displays achievement level results by grade and subject.

*Results for grade 9 students who participated in one of the four high school STE tests are not included here or summarized for official school, district, or state reporting until 2017, when they will be included with grade 10 students who took one of the four STE tests in 2017. Grade 10 results include only students continuously enrolled in the state from fall of grade 9 through spring of grade 10.

V. Grade-level Portfolios

A relatively small number of students who are achieving at grade-level expectations, but are unable to participate in standard MCAS tests even with the use of accommodations, due to the nature and severity of their disabilities, are permitted to submit a "grade-level" MCAS-Alt portfolio (i.e., an *alternate assessment based on grade-level achievement standards*).

Students who submit grade-level portfolios are eligible to earn a score equivalent to a student who scores *Needs Improvement*, *Proficient*, or *Advanced* on the standard test, when they demonstrate the grade-level knowledge and skills described for students in their grade in each assessed standard.

Grade-level portfolios require students to submit a range of work samples that address all aspects of selected standards in each content area; and that show evidence of the student's thinking and independent problem-solving.

VI. Competency Determination Portfolios

It is not anticipated that students with significant cognitive disabilities will meet the state's minimum passing standard for high school graduation and earn a Competency Determination (CD) because the vast majority are working well below grade-level expectations. However, each year a small number of students who are working at grade-level expectations, but participate in the high school MCAS-Alt, are able to earn a CD. Students are eligible to earn a CD if they demonstrate in their portfolio a level of knowledge and skills comparable to that of a student who has passed the standard grade 10 MCAS tests in ELA, mathematics, and STE. Portfolios are evaluated by panels of content area experts to ensure that they meet the required standard of performance in that subject. Specific requirements for submission of CD portfolios are described in the *Educator's Manual for MCAS-Alt*.

Students may elect, but are not required, to resubmit their portfolios in ELA, mathematics, and/or STE each year beyond grade 10 until they have earned an achievement level of *Needs Improvement*, or have exited publicly funded education. Table 5 shows the number of students who have earned an achievement level of *Needs Improvement* or higher on their MCAS-Alt portfolios since 2001.

Table 5. Number of Students Who Participated in MCAS-Alt and Met the Competency Determination Requirement in Each Subject

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ELA	8	8	11	3	13	5	10	4	8	8	3	1	3
Math	3	1	15	6	10	12	10	14	10	7	3	1	12
Science and Tech/Eng							0	3	14	12	11	5	9

	2014	2015	2016	Total (2001-2016)
ELA	1	2	0	88
Math	5	4	4	117
Science and Tech/Eng	12	6	5	77

Note: STE was added to the Competency Determination requirement beginning with the class of 2010.

VII. MCAS-Alt and Accountability: PPI Determinations

The participation and achievement of students who take alternate assessments are included in determinations of school and district Progress and Performance Index (PPI) results, using the indices shown in Table 6. In 2012, the PPI replaced Adequate Yearly Progress (AYP) through the state's Race to the Top accountability waiver as the primary method of making accountability determinations for schools and districts.

In calculating the PPI, each school and district is assigned a 100-point index for each student subgroup based on their achievement and growth/improvement in ELA, mathematics, and STE; and for high schools, graduation and dropout rates. All districts, schools, and subgroups are expected to reduce by half the gap between the 2011 Composite Performance Index (CPI) baseline and proficiency for all students (100 percent) by the 2016–2017 school year.

Students assessed on the MCAS-Alt receive CPI points for the purpose of determining PPI according to the guidelines below. This provision should not be confused with existing state requirements to meet the CD standard, nor should this be misinterpreted as a quota or cap on the number of students who may take alternate assessments.

Table 6
Assignment of Composite Performance Index Points

Students taking standard tests and MCAS-Alt participants who do not have significant cognitive disabilities			MCAS-Alt participants with significant cognitive disabilities	
MCAS Scaled Score	**Achievement Level**	**CPI Points Awarded**	**MCAS-Alt Achievement Level**	**CPI Points Awarded**
240–280	Proficient and Advanced	**100**	Progressing (for certain disability types)[1]	**100**
230–238	Needs Improvement – High	**75**	Progressing (for certain disability types)[2] and Emerging	**75**
220–228	Needs Improvement – Low	**50**	Awareness	**50**
210–218	Warning/Failing – High	**25**	Portfolio Incomplete	**25**
200–209	Warning/Failing – Low	**0**	Portfolio Not Submitted	**0**

[1] Intellectual, Sensory/Deaf and Blind, Multiple Disabilities, Autism, and Developmental Delay
[2] Sensory/Hard of Hearing or Deaf, Communication, Sensory/Vision Impairment or Blind, Emotional, Physical, Health, Specific Learning Disabilities, Neurological

The U.S. Department of Education requires that the total number of students taking the MCAS-Alt who receive 100 CPI points and are included in PPI determination may not exceed one percent of the total number of students assessed. To meet this requirement, the policy changes listed on the following page have been implemented.

1. The Department will assign 100 CPI points only to students

    - who score *Progressing* on the MCAS-Alt; and
    - who have been identified through the Student Information Management System (SIMS) as having the following **primary disabilities**: *Intellectual, Sensory/Deaf and Blind, Multiple Disabilities, Autism,* and *Developmental Delay*; and
    - whose **level of need** for special education services has been reported as *High*.

    The Department will further prioritize among these students, as needed, to reach a maximum total of one percent, based on the nature of disability and reported level of need for special education services.

2. The Department will assign 75 CPI points to students who score *Progressing* (from the above categories, but with lower levels of need) as well as those who have been identified in SIMS as having the following primary disabilities: *Sensory/Hard of Hearing or Deaf, Communication, Sensory/Vision Impairment or Blind, Emotional, Physical, Health, Specific Learning Disabilities,* or *Neurological*.

3. All other students with disabilities assessed using the MCAS-Alt who do not score at the *Progressing* level will be assigned CPI points as follows: students scoring at the *Emerging* level receive 75 CPI points, *Awareness* 50 CPI points, and *Incomplete* 25 CPI points.

VIII. Resources and Professional Development for Educators

The Department sponsors approximately 16 regional training sessions annually for educators responsible for conducting the MCAS-Alt. Technical assistance is available throughout the school year from the Department's Student Assessment Services office and from members of the MCAS-Alt Teacher Network who are available to assist their in-district colleagues and who assist at Department-sponsored training sessions.

Notices of training opportunities are sent to each school by fax, and bimonthly newsletters are sent to subscribers by email. Publications related to MCAS-Alt are available on the Department's website and are distributed at Department training sessions.

Assistance for educators conducting MCAS-Alt is available by contacting the Department by email at mcas@doe.mass.edu or by phone at 781-338-3625, or by contacting the MCAS Service Center at 800-737-5103.

Appendix A. 2016 MCAS-Alt Achievement Level Results by Grade and Subject

Table 7. 2016 MCAS-Alt Achievement Level Results: Grade 3

	English Language Arts		Mathematics	
	Number	Percent [a]	Number	Percent [a]
Incomplete	44	3.7	99	8.5
Awareness	17	1.4	16	1.4
Emerging	457	38.9	64	5.5
Progressing	653	55.6	984	84.6
Needs Improvement	4	0.3	0	0
Proficient	0	0	0	0
Advanced	0	0	0	0
Total	**1,175**	**100**	**1,163**	**100**

[a] Percentages may not add up to 100 percent due to rounding.

Table 8. 2016 MCAS-Alt Achievement Level Results: Grade 4

	English Language Arts		Mathematics	
	Number	Percent [a]	Number	Percent [a]
Incomplete	37	3.0	83	6.7
Awareness	17	1.4	10	0.8
Emerging	459	36.6	85	6.9
Progressing	741	59.1	1,059	85.6
Needs Improvement	0	0	0	0
Proficient	0	0	0	0
Advanced	0	0	0	0
Total	**1,254**	**100**	**1,237**	**100**

[a] Percentages may not add up to 100 percent due to rounding.

Table 9. 2016 MCAS-Alt Achievement Level Results: Grade 5

	English Language Arts		Mathematics		Science and Technology/ Engineering	
	Number	Percent [a]	Number	Percent [a]	Number	Percent [a]
Incomplete	63	5.0	157	12.2	83	7.0
Awareness	20	1.6	13	1.0	8	0.7
Emerging	425	33.6	87	6.7	111	9.4
Progressing	757	59.8	1,031	80.0	983	82.9
Needs Improvement	1	0.1	1	0.1	2	0.1
Proficient	0	0	0	0	0	0.0
Advanced	0	0	0	0	0	0.0
Total	**1,266**	**100**	**1,289**	**100**	**1,187**	**100**

[a] Percentages may not add up to 100 percent due to rounding.

Table 10. 2016 MCAS-Alt Achievement Level Results: Grade 6

	English Language Arts		Mathematics	
	Number	**Percent [a]**	**Number**	**Percent [a]**
Incomplete	55	4.8	97	8.2
Awareness	15	1.3	8	0.7
Emerging	409	35.5	85	7.2
Progressing	672	58.3	987	83.9
Needs Improvement	1	0.1	0	0
Proficient	0	0	0	0
Advanced	0	0	0	0
Total	**1,152**	**100.0**	**1,177**	**100**

[a] Percentages may not add up to 100 percent due to rounding.

Table 11. 2016 MCAS-Alt Achievement Level Results: Grade 7

	English Language Arts		Mathematics	
	Number	**Percent [a]**	**Number**	**Percent [a]**
Incomplete	74	6.2	153	12.5
Awareness	21	1.8	9	0.7
Emerging	407	34.1	74	6.1
Progressing	688	57.7	979	80.2
Needs Improvement	3	0.3	5	0.4
Proficient	0	0	0	0
Advanced	0	0	0	0
Total	**1,193**	**100**	**1,220**	**100**

[a] Percentages may not add up to 100 percent due to rounding.

Table 12. 2016 MCAS-Alt Achievement Level Results: Grade 8

	English Language Arts		Mathematics		Science and Technology/ Engineering	
	Number	**Percent [a]**	**Number**	**Percent [a]**	**Number**	**Percent [a]**
Incomplete	69	6.2	116	10.2	60	5.6
Awareness	21	1.9	7	0.6	4	0.4
Emerging	388	34.9	117	10.3	133	12.5
Progressing	634	57.0	895	78.8	870	81.6
Needs Improvement	0	0	1	0.1	0	0.0
Proficient	0	0	0	0	0	0.0
Advanced	0	0	0	0	0	0.0
Total	**1,112**	**100**	**1,136**	**100**	**1,067**	**100**

[a] Percentages may not add up to 100 percent due to rounding.

Table 13. 2016 MCAS-Alt Achievement Level Results: Grade 10

	English Language Arts		Mathematics		Science and Technology/ Engineering [b]	
	Number	Percent [a]	Number	Percent [a]	Number	Percent [a]
Incomplete	84	9.2	113	12.2	98	13.2
Awareness	19	2.1	12	1.3	15	2
Emerging	367	40.2	146	15.8	110	14.8
Progressing	441	48.2	650	70.3	517	69.4
Needs Improvement	2	0.2	1	0.1	4	.3
Proficient	1	.1	2	.2	1	0
Advanced	0	0	0	0	0	0
Total	**914**	**100**	**924**	**100**	**745**	**100**

[a] Percentages may not add up to 100 percent due to rounding.

[b] Results for grade 9 students who participated in one of the four high school STE tests are not included here or summarized for official school, district, or state reporting until 2017, when they will be included with grade 10 students who took one of the four STE tests in 2017.

Appendix B. 2016 Participation in Standard Tests and MCAS-Alt by Grade and Subject*

Table 15. Participation in 2016 MCAS and MCAS-Alt: Grade 3

	English Language Arts		Mathematics	
	Number	**Percent**	**Number**	**Percent**
Standard tests	69,682	98.3	69,698	98.4
MCAS-Alt, based on grade-level achievement standards	5	0.0	5	0.0
MCAS-Alt, based on alternate achievement standards	1,170	1.7	1,158	1.6
Total students assessed	**70,857**	**100**	**70,861**	**100**

Table 16. Participation in 2016 MCAS and MCAS-Alt: Grade 4

	English Language Arts		Mathematics	
	Number	**Percent**	**Number**	**Percent**
Standard tests	68,359	98.2	68,382	98.2
MCAS-Alt, based on grade-level achievement standards	4	0.0	1	0.0
MCAS-Alt, based on alternate achievement standards	1,250	1.8	1,236	1.8
Total students assessed	**69,613**	**100**	**69,619**	**100**

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Table 17. Participation in 2016 MCAS and MCAS-Alt: Grade 5

	English Language Arts		Mathematics		Science and Technology/ Engineering	
	Number	**Percent**	**Number**	**Percent** [a]	**Number**	**Percent**
Standard tests	68,186	98.2	68,151	98.1	68,492	98.3
MCAS-Alt, based on grade-level achievement standards	3	0.0	4	0.0	2	0.0
MCAS-Alt, based on alternate achievement standards	1,263	1.8	1,285	1.9	1,185	1.7
Total students assessed	**69,452**	**100**	**69,440**	**100**	**69,679**	**100**

Table 18. Participation in 2016 MCAS and MCAS-Alt: Grade 6

	English Language Arts		Mathematics	
	Number	**Percent**	**Number**	**Percent**
	69,338	98.4	69,263	98.3
MCAS-Alt, based on grade-level achievement standards	3	0.0	4	0.0
MCAS-Alt, based on alternate achievement standards	1,149	1.6	1,172	1.7
Total students assessed	**70,490**	**100**	**70,439**	**100**

***** Tables in Appendix B include students who participated in MCAS tests, and students in grades 3–8 who participated in the Partnership for Assessment of Readiness for College and Careers (PARCC) tests in ELA and Mathematics.

Table 19. Participation in 2016 MCAS and MCAS-Alt: Grade 7

	English Language Arts		Mathematics	
	Number	**Percent**	**Number**	**Percent**
Standard tests	69,398	98.3	68,890	96.3
MCAS-Alt, based on grade-level achievement standards	5	0.00	6	0.0
MCAS-Alt, based on alternate achievement standards	1,188	1.7	1,214	1.7
Total students assessed	**70,591**	**100**	**70,110**	**100**

Table 20. Participation in 2016 MCAS and MCAS-Alt: Grade 8

	English Language Arts		Mathematics		Science and Technology/ Engineering	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Standard tests	69,259	98.4	69,099	98.4	69,570	98.5
MCAS-Alt, based on grade-level achievement standards	1	0.0	6	0.0	0	0.0
MCAS-Alt, based on alternate achievement standards	1,111	1.6	1,130	1.6	1,067	1.5
Total students assessed	**70,371**	**100**	**70,235**	**100**	**70,637**	**100**

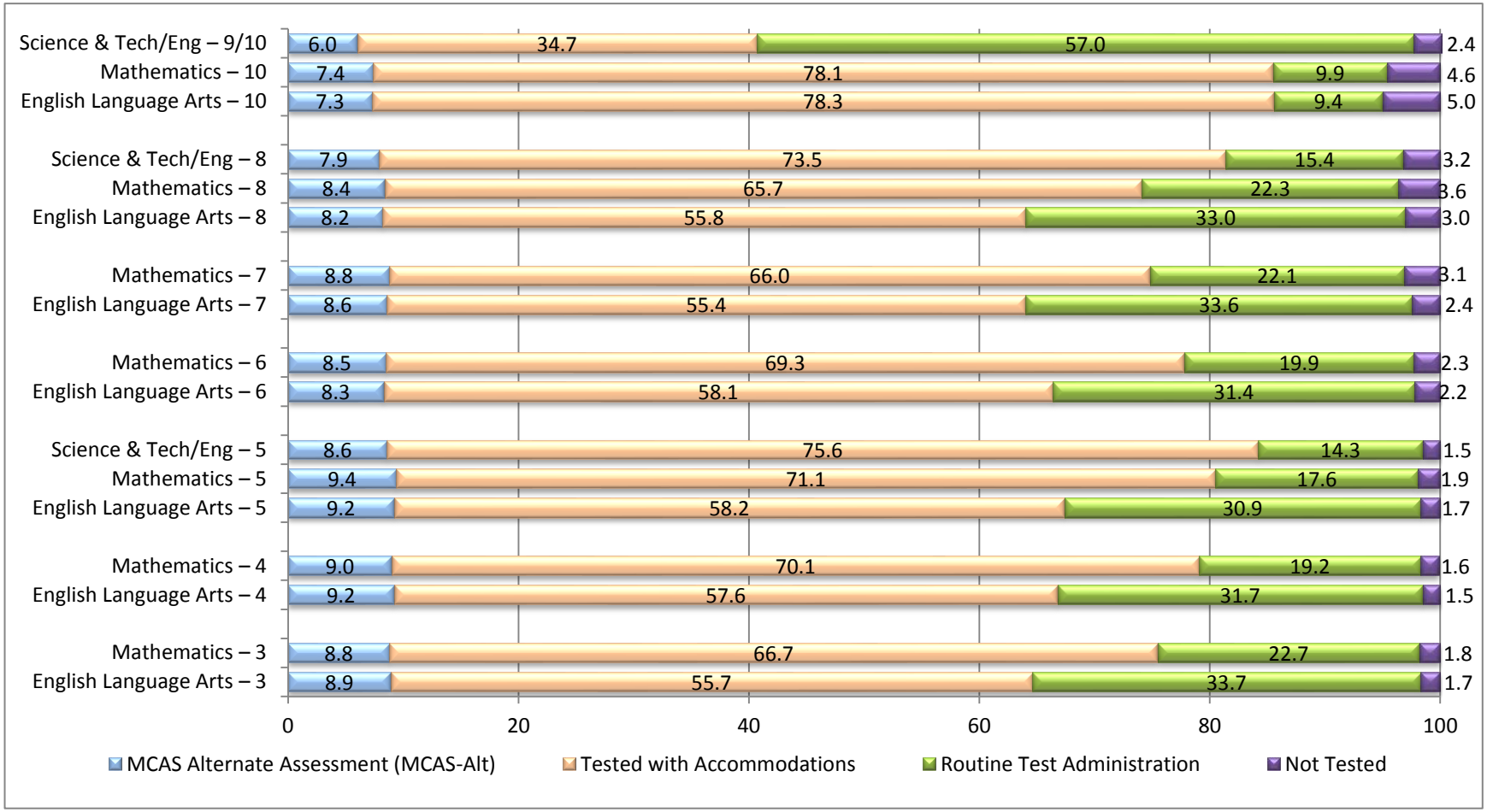
Table 21. Participation in 2016 MCAS and MCAS-Alt: Grades 10

	English Language Arts		Mathematics		Science and Technology/ Engineering [a]	
	Number	**Percent**	**Number**	**Percent** [a]	**Number**	**Percent**
Standard tests	68,027	98.7	69,032	98.7	67,226	99
MCAS-Alt, based on grade-level achievement standards	0	0.0	1	0.0	2	0.0
MCAS-Alt, based on alternate achievement standards	911	1.3	921	1.3	713	1.0
Total students assessed	**69,938**	**100**	**69,954**	**100**	**67,941**	**100**

[a] Grade 10 STE includes students in grades 9 and 10 who participated in any of the four subjects (Biology, Chemistry, Introductory Physics, and Technology/Engineering) and were continuously enrolled in the state from fall of grade 9 through spring of grade 10.

Appendix C
2016 Participation Rate and Method of Participation by Students with Disabilities*

(Percentages of total students with disabilities in each grade)



* Appendix C includes students who participated in standard MCAS tests and students in grades 3–8 who participated in the Partnership for Assessment of Readiness for College and Careers (PARCC) tests in ELA and Mathematics. All students in grade 10 participated in MCAS ELA, Mathematics, and STE. Grade 10 STE includes students in grades 9 and 10 who participated in any of the four subjects (Biology, Chemistry, Introductory Physics, and Technology/Engineering).

Appendix D. MCAS-Alt Achievement Levels and Descriptors

The MCAS-Alt achievement levels shown below are reported for each assessed subject based on scores obtained using the *Rubric for Scoring Portfolio Strands* (see Appendix E).

Achievement Level	Descriptor
Incomplete	The student's portfolio did not include the requisite evidence and information to allow an achievement level to be determined in the content area.
Awareness	The student demonstrates very little understanding of learning standards in the Massachusetts curriculum frameworks in the content area (as indicated in the alternate assessment portfolio). The student requires extensive prompting and assistance, and performance is primarily inaccurate.
Emerging	The student demonstrates a simple understanding of a limited number of learning standards in the Massachusetts curriculum framework in the content area at below-grade-level expectations (as indicated in the alternate assessment portfolio). The student requires frequent prompting and assistance, and performance is limited and inconsistent.
Progressing	The student demonstrates a partial understanding of a limited number of learning standards in the Massachusetts curriculum framework in the content area, and addresses below-grade-level expectations (as indicated in the alternate assessment portfolio). The student appears to be receiving challenging instruction and is steadily learning new skills, concepts, and content. The student requires minimal prompting and assistance, and the performance is fundamentally accurate.
*Needs Improvement	The student demonstrates a partial understanding of subject matter in the Massachusetts curriculum framework in the content area and solves some simple problems at grade-level expectations.
*Proficient	The student demonstrates a solid understanding of challenging subject matter in the Massachusetts curriculum framework in the content area and solves a wide variety of problems at grade-level expectations.
*Advanced	The student demonstrates a comprehensive and in-depth understanding of subject matter in the Massachusetts curriculum framework in the content area and provides sophisticated solutions to complex problems at grade-level expectations.

* In order to earn a Competency Determination, students must achieve a score of either *Proficient* on the grade 10 English Language Arts and Mathematics tests; or a score of *Needs Improvement*, and satisfy the requirements of an Educational Proficiency Plan; for Science and Technology/Engineering, students must achieve a score of *Needs Improvement* on one of four high school STE tests.

Appendix E. MCAS-Alt Rubric for Scoring Portfolio Strands

	1	2	3	4	5
Level of Complexity	Portfolio strand reflects little or no basis in, or is unmatched to, curriculum frameworks learning standard(s) required for assessment.	Student primarily addresses social, motor, and communication "access skills" during instruction based on curriculum frameworks learning standards in this strand.	Student addresses curriculum frameworks learning standards that have been modified below grade-level expectations in this strand.	Student addresses a narrow sample of curriculum frameworks learning standards (1 or 2) at grade-level expectations in this strand.	Student addresses a broad range of curriculum frameworks learning standards (3 or more) at grade-level expectations in this strand.

	M	1	2	3	4
Demonstration of Skills and Concepts	The portfolio strand contains insufficient information to determine a score.	Student's performance is primarily inaccurate and demonstrates minimal understanding in this strand **(0–25% accurate)**.	Student's performance is limited and inconsistent with regard to accuracy and demonstrates limited understanding in this strand **(26–50% accurate)**.	Student's performance is mostly accurate and demonstrates some understanding in this strand **(51–75% accurate)**.	Student's performance is accurate and is of consistently high quality in this strand (**76–100% accurate**).
Independence	The portfolio strand contains insufficient information to determine a score.	Student requires extensive verbal, visual, and physical assistance to demonstrate skills and concepts in this strand **(0–25% independent)**.	Student requires frequent verbal, visual, and physical assistance to demonstrate skills and concepts in this strand (**26–50% independent)**.	Student requires some verbal, visual, and physical assistance to demonstrate skills and concepts in this strand (**51–75% independent)**.	Student requires minimal verbal, visual, and physical assistance to demonstrate skills and concepts in this strand (**76–100% independent)**.
Self-Evaluation	The portfolio strand does not show evidence of self-correction, task-monitoring, goal-setting, and reflection in this content area.	Student infrequently self-corrects monitors, sets goals, and reflects in this content area— only one example of self-evaluation was found in this strand.	Student self-corrects monitors, sets goals, and reflects in this content area—multiple examples of self-evaluation were found in this strand.		
Generalized Performance		Student demonstrates knowledge and skills in one context, or uses one approach and/or method of response and participation in this strand.	Student demonstrates knowledge and skills in multiple contexts, or uses multiple approaches and/or methods of response and participation In this strand.		